

SAC INTER-COMPANY CORRESPONDENCE 293

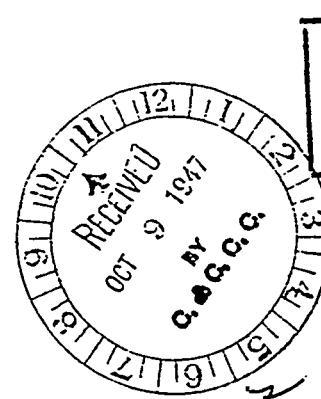
(Insert Name) COMPANY Carbide and Carbon Chemicals Corp. LOCATION Post Office Box P Oak Ridge, Tenn.

TO: S. C. Barnett DATE: October 1, 1947

LOCATION: K-1001, A-217 SUBJECT: Water Contamination

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PLANT RECORDS DEPT.
CENTRAL FILE
REC. C 13882
FILE
X-REF.
X-REF.



REPORT NO.
KZ 5229

A survey has been made of all locations on the K-25 area where samples of ground or drain water are desirable on the basis of possible contamination with uranium and fluorine. The attached listing of locations has been reviewed with several members of the K-25 Special Hazards Committee and their suggestions are incorporated.

The Health Physics Section is engaged in taking an initial set of 23 samples as listed on page six and in the last column of the attached table.

It is proposed that, as soon as the laboratory analysis of the initial set of samples are available, K-25 Special Hazards Committee review the program as outlined in this memorandum and decide on the number, frequency and type of analysis required. In addition, the responsibility of taking the samples for future surveys should be decided.

In discussions with Dr. Hurd, it was tentatively agreed that if preliminary investigations indicate the need, a sampling frequency schedule as follows could be handled by the analytical group:

- a. Drinking water and effluent from K-25 into Poplar Creek-once a day.
- b. The 13 samples on page six-once a week.
- c. The 10 collected samples in the last column-once a month.

This document has been approved for release
to the public by:
A. S. Goss
Date: 6 Aug 66
Technical Information Office
Oak Ridge K-25 Site

Classification changed to: UNCLASSIFIED
Classification changed to: (Level and category)
TDC or ADD signature (first reviewer) Date
Sam W. Hall 2/21/96
TDC or ADD signature (final reviewer) Date
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Carbide and Carbon Chemicals Corporation Operating
Contractor for the U.S. Atomic Energy Commission.

WATER CONTAMINATION CHECK GUIDE IT

Contam. Bldg.	Building Identification	Possible Source or Sources of Contamination	Drainage Posi- tions ibilities	Ground Drair	Ultimate Drair	Proximate Specific Sample Points (Circled no. indi- cates no. of samples)	Collected Sam- ple Points
K-1239	Contaminated sludge pit	Earth bottom of pit al- lows seepage.	Seepage only	Ditches each side of hill	Poplar Creek N. of K-303-	(3) Each ditch near patrol road, and at junction of two let W of Pople Creek Road.	Downstream of SD opening in let W of Pople Creek Road.
K-302 K-303to7	Process Bldg "	In all process Bldgs. From vents to ground hence to SD. From spills or reaction products hosed, washed to ground to SD	SD & SS	Thru catch basins to SD	Poplar Creek via inlet W of Poplar Creek Road	(?) 32" pipe opening to inlet at SS manholes*	(1)
K-1037	Formerly ware- house for proc. equip. storage. Sand blast shed	Dusting or washing to ground or to SD system	SD & Sc	Thru catch basins to SD	Poplar Creek via inlet W of Poplar Creek Road.	(1) 24" pipe opening at N. fence of R.R. gate	
K-1069		Contamination from drums rain washed to ground, plus possible leakage seeping into ground.	Open ditches only	Unlined ditches	Poplar Creek via inlet	(2) Ditches crossing NE patrol road	
K-1218	Contaminated Storage Yard	Contamination from drums rain washed to ground, plus possible leakage seeping into ground.	Open ditches only	Unlined ditches	Poplar Creek via inlet	(2) Ditches crossing NE patrol road	
K-1301 K-1303 K-1409	C-216 Mfg. Decontam. & Recovery change house	Dusting and washing thru sinks and floor drains to SD & SS and (in case of 1303) hcsed to ground outside bldg.	SD & SS	Thru catch basins to SD	Poplar Creek via inlet	(5) 8" & 18" SD pipe openings W at K-1218 and 42" " " plus nearest SS manholes *	

(consult building print)

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Content.	Building Identification	Possible Source or Sources of Contaminating Materials	Drainage Patterns	Ground Drains	Ultimate Disposal Points	Proximate Sampling Points	Collected Sample Points
13 N.E.C. R.	Paints & Product N.W. (K-27)	Small spills hosed, washed or dust drift to ground or driveway drains.	SD & SS Thru catch basin to SD	Poplar Creek W. Bayou SW of Garage	(2) Galveston area at N end of ditch K-722 & at Seminary.		
104 N.E.C. R.	Works Lab.	Material washed thru sink drains to SS system; spillage and dusting to floor drain and SD.	SD & SS As above (Outside corner "Bayou" termination of Garage poss.neg.)	Poplar Creek via concrete lined ditch N of K-1025-C	(7) At 3 42" pine drums S of K-1024, at pine opening cutline perimeter rate at NE corner K-1021 and at each SS manhole.	(7)	
103-7 N.E.C. R.	Process Bldgs.	From vents to ground thence SD & SS to SD. Fr. spills of reaction products hosed off and washed to ground to SD.	Thru catch basins to SD	Poplar Creek via concrete lined ditch N of K-1025-C	(5) In both ditches, at two 32" pine culverts and at SS manholes	Drain opening on S. bank Poplar Creek at 4-3-A-5 on map.	
105-to 7 N.E.C. R.	Shipping drum warehouses,	Rain washed to ground thence to SD	SD only for K-1025-C		(3)		
104 N.E.C. R.	Process Bldgs.	As given above.	SD & SS As above	Poplar Creek N of K-1025E and W of K-204	(10) At pine cranining to ditch at Poplar Creek and at SS manholes at 4-0-B, 3 on map.	Drain opening on E bank Poplar Creek at 4-0-B, 3 on map.	(4)

(Consult building print)

Section.	Building Identification	Possible Source or Sources of Contamination	Prairiego possible ditches	Ground drains	Ultimate Drain	Dissimilate Specific Sample Points	Collected Sample Points
I-1232	River Scrap Yard	Contamination rain wash- ed to ground from equip- ment, thence drained to Clinch River.	Surface dry, to ditches	Open ditches only	Clinch River (2)One in drainage via "Bayou" fence to left of Yard gate and second at ditch opening to "Bayou" between Yard and Gallaher Gate.	(8)	At mouth of drainage ditch in "Bayou" be- tween Scrap Yard and Gallaher Gate
I-1233	Scrap yard storage and office bldgs.						
I-1234							
I-1235							
	Jones & R A scrap piles between River Yard and Power House.	As above	Surface drainage splits to ditches and directly to Clinch R.	Few open ditches only	Clinch River (4)Along Clinch banks (1)additional at print where ditch starts to pass Carbide Yard flowing E	(4)	Clinch River W of Jones yard center

Clinch River (6)Approximately 2 miles S-50
open ditches emptying to Clinch River; and at
SS marshes as needed.

SS & SD
Ditches, Clinch River
few catch
basins

Combination of all
above cited reasons,
plus actual ground
contamination from
high-pressure vessel
breaks resulting in
leakage-to-atmos.
(thence ground) of
often exceeding 300 lbs
C-616 at a tire.

S-50
All process
and storage
buildings

Consult building print